

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method of content substitution, comprising:

receiving data representing video content, the data having a plurality of packet identifiers (PIDs) where a first PID ~~each PID~~ is associated with a stream ~~one or more macroblocks~~ of original content, where the original content is made up of frames of content with each frame being made up of a plurality of original macroblocks;

where a second PID is associated with substitute content, and where the substitute content comprises one or more substitute macroblocks of content but constitutes less than an entire frame of macroblocks;

initiating processing of the original content having the first PID;

determining that a substitution criterion has been met to replace one or more macroblocks in the at least one frame of original ~~substitute~~ content with one or more macroblocks of substitute ~~original~~ content, ~~where the one or more macroblocks constitute less than an entire video frame of macroblocks,~~ wherein the replacing modifies at least one frame of the original content by replacement of less than all original macroblocks in a full frame of the original content;

~~substituting the~~ replacing the one or more macroblocks of the original content having the first PID with one or more macroblocks of substitute content having the ~~having a~~ second PID to produce modified content ~~for the one or more macroblocks having a first PID;~~

where, the replacing is carried out by selectively switching a controller from a bypass mode to a mode that effects replacement of the substitute macroblocks for the original macroblocks; and

processing the modified ~~substituted~~ content.

2. (Currently Amended) The method according to claim 1, wherein the controller ~~carried out in a decoder~~ forms ~~forming~~ a part of a television Set-top box.

3. (Original) The method according to claim 1, carried out in a hardware state machine.

4. (Original) The method according to claim 1, carried out in a programmed processor.
5. (Original) The method according to claim 1, wherein the substitution criterion is met as a result of receipt of a flag.
6. (Original) The method according to claim 1, wherein the substitution criterion is met as a result of an operator input.
7. (Currently Amended) The method according to claim 1, wherein the processing comprises playing the modified content.
8. (Currently Amended) The method according to claim 1, wherein the replacing ~~substituting~~ comprises using private signaling to select the one or more macroblocks of substitute content with the second PID and discarding the one or more macroblocks of original content with the first PID.
9. (Currently Amended) The method according to claim 1, wherein the replacing ~~substituting~~ comprises using private signaling to select the one or more macroblocks of substitute content on the second PID while receiving the one or more macroblocks of original content with the first PID.
10. (Currently Amended) The method according to claim 1, wherein replacing ~~substituting~~ is initiated and terminated by private signaling forming part of an adaptation layer of packets in a data stream.
11. (Original) The method according to claim 10, wherein the adaptation layer is in a packet with the second PID.

12. (Original) The method according to claim 10, wherein the adaptation layer is in a packet with the first PID.

13. (Original) The method according to claim 10, wherein the adaptation layer is in a packet that is neither the second nor the first PID.

14. (Currently Amended) A computer readable non-transitory storage medium storing instructions which, when executed on one or more programmed processors ~~a programmed processor~~, carry out the content substitution method according to claim 1.

15. (Currently Amended) A method of content substitution, comprising:

receiving data representing content, the data having a plurality of packet identifiers (PIDs) ~~associated with one or more macroblocks of original content and one or more macroblocks of substitution content, where the one or more macroblocks of substitution content constitutes less than an entire video frame of macroblocks~~ where a first PID is associated with a stream one or more macroblocks of original content, where the original content is made up of frames of content with each frame being made up of a plurality of original macroblocks;

where a second PID is associated with substitute content, and where the substitute content comprises one or more substitute macroblocks of content but constitutes less than an entire frame of macroblocks;

placing the original content having a primary PID into a data stream;

receiving an initiation flag indicating initiation of a PID mapping operation;

at a PID mapper, mapping content having a secondary PID to a primary PID and placing the mapped content into the data stream so as to modify at least one frame of the original content by replacement of less than all original macroblocks in a full frame of the original content;

responsive to the initiation flag, selectively switching a controller from a bypass mode to a mode that effects replacement of the substitute macroblocks for the original macroblocks;

receiving a termination flag indicating termination of the PID mapping operation;

responsive to the termination flag, selectively switching the controller back to the bypass mode; and

continuing to place content having a primary PID into the data stream.

16. (Currently Amended) The method according to claim 15, wherein the controller carried out in a decoder forms forming a part of a television Set-top box.

17. (Original) The method according to claim 15, carried out in a hardware state machine.

18. (Original) The method according to claim 15, carried out in a programmed processor.

19. (Currently Amended) The method according to claim 15, wherein the initiation flag is indicative that a substitution criterion has been met ~~is met as a result of receipt of a flag.~~

20. (Currently Amended) The method according to claim 19 ~~claim 15~~, wherein the substitution criterion is met as a result of an operator input.

21. (Currently Amended) The method according to claim 15, wherein ~~the substituting comprises using~~ private signaling is used to select the macroblock of content with the secondary PID and discarding the macroblock of content with the primary PID.

22. (Original) The method according to claim 15, wherein substitution is initiated and terminated by private signaling forming part of an adaptation layer of packets in a data stream.

23. (Original) The method according to claim 22, wherein the adaptation layer is in a packet with the one of the primary PID and the secondary PID.

24. (Original) The method according to claim 22, wherein the adaptation layer is in a packet that has neither the secondary nor the primary PID.

25. (Currently Amended) A computer readable non-transitory storage medium storing instructions which, when executed on a programmed processor, carry out the content substitution method according to claim 15.

26. – 27. (Cancelled)

28. (Currently Amended) A decoder, comprising:

a receiver receiving data that represents content, the data having a plurality of packet identifiers (PIDs) ~~associated with one or more macroblocks of original content and one or more macroblocks of substitution content, where the one or more macroblocks of substitution content constitutes less than an entire video frame of macroblocks~~ where a first PID is associated with a stream of original content, where the original content is made up of frames of content with each frame being made up of a plurality of original macroblocks;

where a second PID is associated with substitute content, and where the substitute content comprises one or more substitute macroblocks of content but constitutes less than an entire frame of macroblocks;

a content decoder configured to play content having the first PID;

a controller that determines that a substitution criterion has been met to substitute one or more macroblocks of substitute content for one or more macroblocks of original content and switches the decoder from a bypass mode to a mode that effects replacement of the substitute macroblocks for the original macroblocks, wherein substitution of the substitute macroblocks into the original content modifies at least one frame of the original content by replacement of less than all original macroblocks in a full frame of the original content; and

a PID mapper that maps content having the second PID to the first PID so that the content originally having the second PID is played.

29. (Original) The decoder according to claim 28, wherein the decoder resides in a television Set-top box.

30. (Currently Amended) A television set-top box decoder, comprising:

a receiver receiving data that represents content, the data having a plurality of packet identifiers (PIDs) where a first PID ~~each PID~~ is associated with a stream ~~one or more macroblocks~~ of original content, where the original content is made up of frames of content with each frame being made up of a plurality of original macroblocks;

where a second PID is associated with substitute content, and where the substitute content comprises one or more substitute macroblocks of content but constitutes less than an entire frame of macroblocks ~~associated with one or more macroblocks of original content and one or more macroblocks of substitution content, where the one or more macroblocks of substitution content constitutes less than an entire video frame of macroblocks;~~

a content decoder configured to play content having the first PID;

a state machine controller and PID mapper in which the controller determines that a substitution criterion has been met to substitute one or more macroblocks of original content, and the PID mapper maps content having the second PID to the first PID so that the content originally having the second PID is played;

wherein the state machine controller determines that the substitution criterion is met as a result of receipt of a flag forming a part of an adaptation layer of packets in the data received by the receiver, where the adaptation layer is in a packet having one of the first and second PIDs;

wherein the substituting comprises using private signaling to select the one or more macroblocks of content with the secondary PID and discarding the one or more macroblocks of content with the primary PID; where, the substituting is carried out by selectively switching the state machine controller from a bypass mode to a mode that effects replacement of the substitute macroblocks for the original macroblocks, and wherein the substituting of the substitute macroblocks into the original content modifies at least one frame of the original content by replacement of less than all original macroblocks in a full frame of the original content .

31. (Previously Presented) A method of content substitution, comprising:

receiving data representing video content, the data having a plurality of packet identifiers (PIDs) where a first PID is associated with a stream of original content, where the original content is made up of frames of content with each frame being made up of a plurality of original macroblocks;

where a second PID is associated with substitute content, and where the substitute content comprises one or more substitute macroblocks of content but constitutes less than an entire frame of macroblocks ~~each PID is associated with one or more macroblocks of original content;~~

receiving mode data representing a content substitution mode of operation of a controller ~~decoder~~, where the controller is operative in either a bypass mode or a mode in which content substitution is carried out ~~the content substitution mode represents one of a plurality of content substitution modes;~~

initiating processing of content having the first PID;

determining that a substitution criterion has been met to replace one or more macroblocks in the at least one frame of original ~~substitute content with~~ one or more macroblocks of substitute ~~original content, where the one or more macroblocks constitute less than an entire video frame of macroblocks;~~

~~selecting a~~ selecting the mode of operation of the decoder in which content substitution is carried out ~~mode of the decoder~~ based on the mode data;

substituting the one or more macroblocks having a second PID for the one or more macroblocks having a first PID, where the substituting of the substitute macroblocks into the original content modifies at least one frame of the original content by replacement of less than all original macroblocks in a full frame of the original content; and

processing the substituted content.

32. (Previously Presented) The method according to claim 31, wherein the substitution criterion is met as a result of receipt of a flag.

33. (Previously Presented) The method according to claim 31, wherein the substitution criterion is met as a result of an operator input.

34. (Previously Presented) The method according to claim 31, wherein substituting is initiated and terminated by private signaling forming part of an adaptation layer of packets in a data stream.

35. (Previously Presented) The method according to claim 31, wherein the plurality of substitution modes comprise a one to one insertion mode, a multi for one insertion or deletion mode and a one for one substitution mode.

36. (Currently Amended) A computer readable non-transitory medium storing instructions which, when executed on a programmed processor, carry out the content substitution method according to claim 31.

37. (Currently Amended) A decoder, comprising:

a receiver receiving data that represents content, the data having a plurality of packet identifiers (PIDs) where a first PID is associated with a stream of original content, where the original content is made up of frames of content with each frame being made up of a plurality of original macroblocks;

where a second PID is associated with substitute content, and where the substitute content comprises one or more substitute macroblocks of content but constitutes less than an entire frame of macroblocks ~~associated with one or more macroblocks of original content and one or more macroblocks of substitution content, where the one or more macroblocks of substitution content constitutes less than an entire video frame of macroblocks;~~

the receiver further receiving mode data representing a content substitution mode of operation of a controller ~~decoder~~, where the content substitution mode represents one of a plurality of content substitution modes;

a content decoder configured to play content having the first PID;

where the controller ~~a controller that~~ determines that a substitution criterion has been met to substitute one or more macroblocks of original content, ~~and that~~ and further selects a content

substitution mode of the decoder based on the mode data in which one or more original macroblocks are deleted and replaced with one or more substitute macroblocks, and wherein substitution of the substitute macroblocks into the original content modifies at least one frame of the original content by replacement of less than all original macroblocks in a full frame of the original content; and

a PID mapper that maps content having the second PID to the first PID so that the content originally having the second PID is played.

38. (Previously Presented) The method according to claim 37, wherein the plurality of substitution modes comprise a one to one insertion mode, a multi for one insertion or deletion mode and a one for one substitution mode.